21 Aug 69 23 357

P 212158Z AUG 69 FM NPIC WASHDC TO RHCOAAA/SAC OFFUTT AFB OMAHA NEBRASKA RUWBKNA/15TH AF MARCH AFB RIVERSIDE CALIF RUWJIEA/14TH SAD BEALE AFB CALIF RUWJIEA/9RTS BEALE AFB CALIF RUWMODA/100 SRW DAVIS MONTHAN AFB ARIZONA RUVRAAA/WRAMA. WARNER ROBBINS AFB GEORGIA RUEFHQA/HQ USAF WASHDC RUCRJCS/DIA/DIAXX-2 WASHDC RUEBJRA/NAVRECONTECHSUPCEN SUITLAND MD RUEAIIA/CIA WASHDC SE C R E T CITE NPIC 6871 SAC FOR DISD, DPLC, DIRI

15TH AF FOR DICK DOR; DIA FOR DIAXX2

25X1 25X1

OFFICE FILE CABLE SEC PP&B/RD

SECUR.

PSG/OC

REPRO

RRD

AID

PROD

WEST EAST

M&S

PGM

DIA-XX4

SPAD

DIA-AP

ADVANCE CX

SANITITED

WITH TEXT

CMX

25X1

IAS

SCIEN

IEG

TSSG/APS

SUBJECT: EVALUATION OF IRIS II TEST MISSION, FLOWN 9 JULY 69.

1. IMAGE QUALITY: THE IMAGE QUALITY OF THIS MISSION RANGES
FROM POOR, ON THE FIRST 350 FRAMES, TO GOOD FOR MOST OF THE RE- DISTRIBUTION MAINDER OF THE MISSION. SEVERE IMAGE SMEAR AND DOUBLE IMAGERY CY

PAGE 2 RUEADJU 0056 S E C R E T IS PRESENT OVER MOST OF THE FORMAT OF FRAMES 1 THRU 350. AFTER FRAME 350 A NOTICEABLE IMPROVEMENT IN QUALITY IS APPARENT THE IMAGERY ALONG THE UNTITLED EDGE IS OF SLIGHTLY BETTER QUALITY THAT THE IMAGERY ALONG THE TITLED EDGE ON THE FORWARD FRAMES THROUGHOUT THE MISSION. THIS CONDITION IS NOT PRESENT ON THE AFT FRAMES. VERY LITTLE DETAIL CAN BE DETECTED IN CLOUD SHADOW-THIS LOSS OF DETAIL APPEARS TO BE THE RESULT OF A SLIGHT UNDEREXPOSED CONDITION. THE INTERPRETATION SUITABILITY IS RATED AS FAIR DUE TO THE POOR QUALITY OF THE FIRST 350 FRAMES, THE EXTENSIVE CLOUD COVER AND THE LOSS OF DETAIL IN CLOUD SHADOW. IN AREAS OF GOOD IMAGERY, THE INTERPRETATION SUITABELLT

IS GOOD. CLOUD COVER AND HAZE OBSCURE APPROXIMATELY 40 PERCENT

OF THE MISSION. MISSION DATA:

HQ USAF FOR AFXOTR, AFIGOS

IRIS II TEST: 9 JULY 1969

В. CAM NUM: 8007 C. A/C NUM: 339

MODE OF OPERATION: STEREO D. FLIGHT TIMES: T/O - 1625Z

C/ON-1827Z

PAGE 3 RUEADJU ØØ56 S E C R E T C/OFF-1950Z C/ON-2218Z

FILM TYPE/FILTER: 3404/W-23A

PROCESS: MX-578 G.

AVERAGE GAMMA: 2.81

ORIGINAL NEGATIVE:

EXPOSURE: THE MISSION APPEARS TO BE SLIGHTLY

UNDEREXPOSED THROUGHOUT.

B. DENSITY AND CONTRAST: GENERALLY THIN TO MEDIUM. IMAGED DEGRADATIONS: BANDING PARALLEL TO THE NINOR AXIS OF THE FILM IS PRESENT THROUGHOUT THE MISSION. IN ADDITION, NUMEROUS PLUS AND MINUS DENSITY STREAKS PARALLEL TO THE MAJOR FILM AXIS ARE PRESENT THROUGHOUT THE MISSION. THESE DEGRADATIONS ARE MOST APPARENT IN AREAS OF HEAVY DENSITY. A PLUS DENSITY STREAK IS PRESENT INTERMITTENTLY IN

Excluded from automatic dewngrading **and** declassification

THE BORDER AREA OF THE TITLED EDGE THRU FRAME 1000. FRAME 514 CONTAINS SEVERAL RANDOMLY SPACED MINUS DENSITY SPOTS OF UNKNOWN ORIGIN. FRAMES 565 AND 566 CONTAIN FOG ASSOCIATED WITH THE CAMERA OFF/ON. FRAMES 2 AND 568 CONTAIN A FOGGED AREA APPROXIMATELY 0.8 INCHES WIDE, EXTENDING 3.9 INCHES AND 3.4

PAGE 4 RUEADJU 0056 S E C R E T
INCHES RESPECTIVELY INTO THE FORMAT. BOTH AREAS ARE LOCATED NEAR
THE 50 DEGREE LEFT SCAN OARK. TWO DIAGONAL ROWS OF PLUS DENSITY
STATIC MARKS (1.3 INCHES APART) APPARENTLY CAUSED BY THE TAKEUP SIDE SKEW BAR, ARE PRESENT NEAR THE 50 DEGREE RIGHT SCAN
MARK. THESE MARKS ARE PRESENT ON MOST FRAMES AFTER THE CAMERA OFF/
ON. A DIAGONAL MINUS DENSITY MARK (1.3 INCHES WIDE) APPARENTLY
CAUSED BY THE SUPPLY SIDE SKEW BAR, IS PRESENT NEAR CENTER
FORMAT IN MOST FRAMES THROUGHOUT THE MISSION. BOTH ANOMALIES
APPARENTLY OCCURRED WHILE THE FILM WAS STATIONARY DURING THE
DATA BLOCK EXPOSURE PERIOD. FRAMES 1215, 1216 AND 1217 EXHIBIT
SEVERE CROSS TRACK SMEAR AT START OF SCAN AND MINOR SMEAR AT
END OF SCAN. NO CAUSE COULD BE DETECTED. DOUBLE IMAGERY IS
PRESENT AT 47 DEGREES LEFT AND RIGHT OF CENTER FORMAT
ON ALL AFT FRAMES. WINDOW JOINTS ARE THE APPARENT CAUSE OF THIS
DEGRADATION.

D. PHYSICAL DEGRADATIONS: SEVERAL MINOR SCRATCHES PARALLEL TO THE MAJOR AXIS OF THE FILM ARE PRESENT THOUGHOUT THE MISSION. FRAMES 634, 720, 721, 802 AND 803 CONTAIN NUMEROUS EMULSION LIFTS. EMULSION DEFECTS ARE PRESENT IN FRAMES 494, 744,

PAGE 5 RUEADJU 0056 S E C R E T AND 772. TWO SMALL CREASES ENTER APPROXIMATELY 0.75 INCH INTO THE DATA BLOCK OF FRAME 210. EIGHT HEAT SPLICES AND TWO ULTRASONIC SPLICES ARE PRESENT IN THE MISSION FILM.

E. DATA RECORDING EQUIPMENT: THE TITLED EDGE SCAN MARKS ARE FAINT AND ARE NOT READILY DETECTABLE. THE UNTITLED EDGE SCAN MARKS ARE SHARP AN WELL DEFINED. THE COUNTER FAILED TO RECYCLE AT THE BEGINNING OF THE MISSION AND AT THE CAMERA OFF/ON BETWEEN FRAMES 565 AND 566. THE WRITE-IN DATA CARD APPEARS DENSE AND IS DIFFICULT TO READ.

F. OTHER: ONE CASE OF MIS-METERING WAD DETECTED. A DA

F. OTHER: ONE CASE OF MIS-METERING WAD DETECTED. A DATA BLOCK OVERLAPS FRAME 205 BY 0.25 INCH. MOST FRAMES MEASURED 60.65 INCHES. MOST FORMATS MEASURED 58.66 INCHES. IN MOST CASES WHERE THE FRAME WAS SHORTER, ALL SCAN SEGMENTS WERE CORRECT (8.38 INCHES) EXCEPT FROM 50 DEGREES TO 30 DEGREES RIGHT WHICH MEASURED APPROXIMATELY 8.1 INCHES. THE FORWARD-TO-FORWARD AND AFT-TO-AFT FRAME OVERLAP RANGES FROM 0 TO 25 PERCENT. THIS PROBLEM APPEARS TO BE THE RESULT OF A PITCHING MOTION OF THE VEHICLE. THE LAST TITLED FRAME OF THE MISSION IS 1452.

4. POSITIVES: ADEQUATE FOR EXPLOITATION PURPOSES. GP-1

SECRET

-END OF BSG-